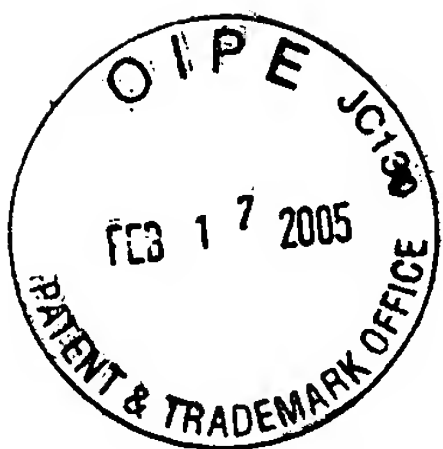


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POWERFLEX DELUXE WALKING STICKS

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SPECIFICATION

This application claims benefit to Provisional Patent Application #60/405,889, filed on 08/26/02.

BACKGROUND

This invention is in the field of health and exercise. The idea came to me as a result of experimentation in my home environment of the Coast Range Mountains of northern Oregon. I have lived here on my 13 acres, surrounded by hundreds of acres of forestland, for 22 years. I hike around here almost every day. I started using a single walking stick, (just a fir branch I picked up from the ground), to ease the strain on my left knee, which had been injured in a motorcycle accident in 1966. As time went on, I discovered that using 2 sticks, one in each hand, was better. In fact, the more I used the 2 sticks together, the more I liked it. I could walk much farther with less pain in my knee. I also discovered that my upper body was becoming tighter, more toned. The only problem was that the dry fir branches that I was using would eventually break. Well, my supply of branches was virtually infinite, so I would just pick up another one. One day I decided to try some fresh, green branches so they would not break so easily. Since they were green, they would flex more than the dry branches. At first I didn't like the effect, ----- too much flex didn't give enough support. So I kept fine tuning my choice of branches until I found the right amount of flex for my weight. The flex acts like shock absorbers on a car. It reduces strain on the joints of the body. So for years I was using these walking. Some people would laugh, but I didn't care because I knew they worked for me. Then I started thinking about a more durable stick. I made a few phone calls, and discovered that the technology already exists to create a lightweight,

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strong, durable, and slightly flexible shaft in either round or ribbon shape. Pole vault poles, fishing poles, golf clubs, hunting bows, ----- all of these must bend, but not break. The amount of stiffness can be easily modified in the manufacturing process.

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SUMMARY

In summary, the main factor is the flexible, shock absorbing, power releasing shaft of my walking stick design. There are other walking sticks for sale in the marketplace right now. Most are one piece and stiff, ----- rigid. These rigid sticks provide support, but are uncomfortable to use for extended periods. Some manufacturers use rubber tips on their sticks to provide some shock absorption. Others have tried using short, (less than 2 inches), metal springs inside the shaft. In fact, I have tried several different brands, from the cheapest to the most expensive. All of them are inferior to the green fir branches that I pick off my trees! My walking sticks, made of durable graphite and fiberglass, with plastic hand grips, and rubber tips, having a flex of about 8 inches, (flex varies according to usage), will be a Cadillac compared to the "Model T's" currently available.

POWERFLEX DELUXE WALKING STICKS are designed to be used in pairs in a manner similar to a cross country skier. As you stride forward with your LEFT foot, simultaneously extend forward the RIGHT hand walking stick, then RIGHT foot forward with the LEFT hand walking stick, and so on. That's all there is to it! You can put more or less pressure on the sticks as you walk, depending on how much strain you want to take off your lower body joints, ----- ankle, knee, hip. By using one stick in EACH hand, you are adding a BALANCED upper body workout to the simple exercise of walking. You are therefore using more muscles, which means you are burning more calories, and getting a greater exercise benefit compared to walking without sticks.

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BRIEF DESCRIPTION OF THE DRAWING

Fig. 1 shows a side view of the device.

#1 is the shaft.

#2 is the handgrip.

#3 is the tip.

#4 is the direction of forward motion.

DETAILED DESCRIPTION OF THE DRAWING

The device is a walking and exercise aid comprised of 3 parts; the shaft 1, the handgrip 2, and the tip 3. The shaft 1 is rod shaped, approximately 3/4 inches in diameter. It is made of strong, lightweight material which can flex repeatedly without breaking. The preferred material is graphite and fiberglass, however there may be other acceptable materials. The shaft 1 is curved slightly along its longitudinal axis to ensure flex in the proper direction. The stiffness of the flex is variable in the manufacturing process to provide satisfactory flex for different weight classes of users. The preferred flex is approximately 6 to 8 inches. The flex characteristic of the shaft 1 provides at least two desirable effects that are minimal or non existent using rigid walking sticks. The shock absorbing effect substantially reduces strain on the joints of the wrist, elbow, and shoulders. The muscles of the arms and upper body are subjected to a smoother transition during contraction and back to relaxation. These effects translate into more comfortable and more efficient exercise. The length of the shaft 1 is variable in the manufacturing process to provide the proper length for different heights of users. The proper length for a 5'10" person is approximately 48".

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The handgrip 2 is made of plastic. It is angled slightly forward of the vertical axis of the shaft 1 approximately 15 degrees, which eases strain on the wrist. The handgrip 2 attaches to the shaft 1 by inserting the upper end of shaft 1 into the receptacle hole in the bottom of handgrip 2. The handgrip 2 is contoured for the fingers, and is flared outward at the top and bottom edges to provide a secure grip.

The tip 3 is made of rubber. The tip 3 attaches to shaft 1 by inserting lower end of shaft 1 into the receptacle hole at the upper area of tip 3. The tip 3 provides satisfactory traction on a wide variety of surfaces, including, but not limited to city sidewalks, asphalt, gravel, sand, grass, and dirt.

The handgrip 2 and the tip 3 are removable and replaceable.